river, per Shalowitz. The rule of thalweg has also been applied to other boundaries where the boundary is described as being the "middle (or center) of the main channel" of a navigable river. See THALWEG, MEDIUM FILUM ACQUAE, GRADIENT BOUNDARY and MEDIAL LINE.

RULE OF TIDEMARK – A baseline for determination of coastal boundaries which follows the sinuosities of the low water mark except where true bays are encountered.

RULES OF PRACTICE – Certain orders made by the courts for the purpose of regulating the proceedings before them.

RUSSIAN MEASURES –

1 archine = 28 inches = 0.71120 meters = 16 verskops.

1 sagene = 3 archines.

500 sagenes = 1 verst.

1 dessiatine = 2,400 sq. sagenes = 2.6997 acres.

S

S (Land Status Records) – South.

SAH (Land Status Records) – Soldier's Additional Homestead.

SB MER (Land Status Records) – San Bernardino Meridian.

SC – South Carolina.

SCS (Land Status Records) - Subsistence Camp Site.

SCS (Land Status Records) – United States Soil Conservation Service.

SD (Land Status Records) – State Director.

SD – South Dakota.

S. DAK. - South Dakota.

SDO (Land Status Records) – State Director's Order.

SDS (Land Status Records) – Soldier's declaratory statement.

SDW (Land Status Records) – Stock Driveway.

SDW WDL (Land Status Records) – Stock driveway withdrawal.

SE (Land Status Records) – Southeast.

SEC (Land Status Records) – Section.

SEC OF AGRI (Land Status Records) – Secretary of Agriculture.

SEC OF THE INT (Land Status Records) – Secretary of the Interior.

SEGR (Land Status Records) – Segregate or Segregated.

SEL (Land Status Records) – Selection or Selected.

SEW MER (Land Status Records) – Seward Meridian.

 $SG \ (Land \ Status \ Records) - State \ Grant.$

SHC (Land Status Records) - Small Holding Claim.

SI (Land Status Records) - Silver.

SIM (Land Status Records) – Simultaneous.

SL MER (Land Status Records) – Salt lake meridian.

SLUP (Land Status Records) – Special Land Use Permit.

S&M (Land Status Records) – Soil and moisture.

SMC – Special Meander Corner.

SO – State Office.

SO (Land Status Records) – Secretary's Order.

SOD (Land Status Records) – Sodium.

SPEC PER (Land Status Records) - Special permit.

SR (Land Status Records) – Serial Register.

SRHE (Land Status Records) – Stockraising Homestead Entry.

SS (Land Status Records) - State Selection.

SSE (Land Status Records) – Subsurface Estate.

ST (Land Status Records) – Small Tract.

STA (Land Status Records) - Station.

STAT. – Statutes. Used in citing a reference to the United States Statutes at large, for example: 85 Stat. 688, which cites the eighty-fifth volume of the United Statues at large, at page 688.

ST CL (Land Status Records) – Small tract classification.

ST HEL MER (Land Status Records) – St. Helena Meridian.

ST LSE (Land Status Records) – Small tract lease.

STS (Land Status Records) – Small tract sale.

ST. STEP MER (Land Status Records) – St. Stephens Meridian.

SUBDIV UND (Land Status Records) – Subdivisions undefined.

SUBJ (Land Status Records) - Subject.

SUL (Land Status Records) - Sulphur.

SUPPL (Land Status Records) – Supplemental.

SUR (Land Status Records) – Survey or Surveyed.

SUS (Land Status Records) - Suspended.

SW (Land Status Records) – Southwest.

SX (Land Status Records) – State Exchange.

SALT LAKE MERIDIAN - The principal meridian governing surveys in most of Utah; it was adopted in 1855.

SALT MARSH – An area of low lying, wet ground containing a high proportion of salt or alkali; generally in arid regions. See COASTAL SALT MARSH and ALKALI FLAT.

SCALE FACTOR*.

SCHOOL LAND DEFICIENCY OR LOSS – Land included in a State school-land grant which the State did not receive, because it was fractional, or claimed prior to admission, or reserved for some other purpose, is termed a loss or deficiency from the area granted. Under such circumstances, a State is entitled to a lieu selection. See SCHOOL LAND INDEMNITY SELECTION.

SCHOOL-LAND INDEMNITY SELECTION – A lieu selection made by a State to compensate for School Lands which it did not secure.

SCHOOL LAND PATENT – A patent which is issued to a State to give it additional evidence of title to a school section since title to school sections ordinarily passes to a State merely upon filing of the accepted survey of the lands. See GRANT IN PLACE and IN PRAESENTI.

SCHOOL LANDS – Sometimes referred to as "school sections" they are the lands included in a grant in place, or a grant in praesenti, to a State in support of common schools. Under the Ordinance of May 20, 1785, section 16 (called Lot 16 in the Ordinance) in each township was set aside for the maintenance of public schools. In 1850 this was changed to sections 16 and 36. In Arizona, New Mexico and Utah, sections 2, 16, 32 and 36 were granted.

SCREE SLOPE – A steep slope formed of rocky material with a marked tendency to creep or slide. See TALUS.

SCRIBE – A hand tool used by surveyors to inscribe the prescribed markings on bearing trees. See SCRIBING*.

SCRIP – A certificate which allows the owner to make a selection of a specified number of acres out of available public lands.

SEAL – In law, a particular sign, made to attest in the most formal manner, the execution of a document or instrument.

SECANT – 1) A line that cuts a geometric curve or surface at two or more points. 2) A trigonometric function of an angle. See SECANT METHOD and SECANT CONE*.

SECANT METHOD – A method for laying off a parallel of latitude in Public Lands surveying.

SECOND FORM RECLAMATION WITHDRAWAL – A reclamation withdrawal which embraces public lands that are capable of being irrigated by a reclamation project.

SECOND PRINCIPAL MERIDIAN – The principal meridian which governs surveys in most of Indiana and in part of Illinois. Adopted in 1805, it is abbreviated 2nd Prin. Mer.

SECTION – The unit of subdivision of a township with boundaries conforming to the rectangular system of surveys, nominally one mile square, containing 640 acres. See REGULAR SECTION, FRACTIONAL SECTION and IRREGULAR SECTION.

SECTIONAL CORRECTION LINE – A latitudinal section line run to rectify a defective latitudinal governing boundary. It is run on cardinal bearing to intersect the opposite controlling boundary where a closing corner is established. See STANDARD PARALLEL, AUXILIARY STANDARD PARALLEL and GOVERNING SECTION LINE.

SECTIONAL GUIDE MERIDIAN – A meridional section line run to rectify a defective meridional governing boundary. It is run on cardinal bearing to intersect the opposite controlling boundary where a closing corner is established. See GUIDE MERIDIAN, AUXILIARY GUIDE MERIDIAN and GOVERNING SECTION LINE.

SECTION CORNER – A corner at the extremity of a section boundary.

SECTION, HALF – Any two quarter sections within a section which have a common boundary; usually identified as the north half, south half, east half, or west half of a particular section.

- **SECTION, QUARTER** One of the aliquot parts of a section. Normally it is a quadrangle measuring approximately ½ mile on each side and containing approximately 160 acres.
- **SECTION, QUARTER-QUARTER** One of the alquot parts of a quarter section. Normally it is a quadrangle measuring approximately ½ mile on each side and containing approximately 40 acres.
- **SEGREGATION SURVEY** Definition by running survey lines on the ground which separate appropriated lands from the public lands. See MINERAL SEGREGATION SURVEY.
- **SELECTION** In general, an application to acquire title to public lands which is submitted by an applicant who acquired the right to apply for such lands by receipt of a grant, by surrender of his own lands in an exchange, by relinquishment of his rights to other lands (lieu selection), by surrender of scrip or by similar means.
- **SEMITANGENT** The distance from the point of curvature or point of tangency to the point of intersection of a highway curve.
- **SENIOR CORNER** A point established and monumented by an approved prior survey.
- **SENIOR LINE** Survey lines created at different times have different standings. The "*senior*" line would be the line which was surveyed and approved first. See SENIOR RIGHTS.
- **SENIOR RIGHTS** The rights which take precedence. The first patent issued usually takes precedence in a situation where a later survey is in conflict with an earlier survey. The first patent issued usually has the superior (senior) right or title regardless of the dates of the surveys.
- **SENIOR SURVEY** The oldest of two or more surveys which fixed the position of the line and is controlling unless officially superseded by a subsequent survey.
- SERIAL REGISTERS Serial registers were instituted in 1908 as a digest of land case records. BLM maintains these individual chronological records of each public land transaction. Each transaction (case) appears as a page or pages in a serial register. Each one is identified by the serial number assigned to it. A running record of each case, its inception and any actions on it, is kept in book form in the land office of each public domain land state. Serial register pages are now microfilmed for ease in retrieval of information as well as to conserve space. As cases are closed the files for them are sent to Federal records centers of the General Services Administration. Also See CONTROL DOCUMENT INDEX.
- **SETTLEMENT CLAIM** A claim to a right to make a homestead entry. Such claims are based upon actual settlement of the public lands involved. They can no longer be initiated except in Alaska.
- SEVEN RANGES, THE The first cadastral survey of the public lands of the United States began in July 1786, in the area immediately south of the "Geographer's Line," in southeastern Ohio. It is called "The Seven Ranges" because plans called for the inclusion of seven ranges of townships in the first tract of land to be offered for sale. In the survey of the seven ranges, sections are numbered from south to north in each range, with number 1 in the southeast corner of the township and number 36 in the northwest corner. See GEOGRAPHER'S LINE, THE; ORDINANCE OF MAY 20, 1785.
- SEWARD MERIDIAN The principal meridian governing surveys in southwestern Alaska; it was adopted in 1911. SHAFT In mining, an opening made at the surface and extending downward into the earth vertically. See DRIFT, TUNNEL and ADIT.
- SHORE The land which is covered and uncovered by the rise and fall of the normal tide. It is the strip of land between the mean high water and mean low water lines. In its strictest use, the term applies only to land along tidal waters. See TIDELANDS.
- SHORELINE, OCEAN (T.R. No. 4) The intersection of a specified plane of water with the shore or beach (e.g., the high water shore line would be the intersection of the plane of mean high water with the shore or beach). The line delineating the shore line on U.S. Coast and Geodetic Survey nautical charts and surveys approximates the mean high water line. The terms "shoreline" and "coast line" are frequently used as being synonymous. When "shore line" is used the user should specify what is meant, e.g., mean high water shore line, mean low water shore line, etc. See BEACH, SHORE, COAST LINE, MEAN HIGH WATER, FORESHORE, BACKSHORE, etc.
- SHORE LINE, RIVER The shore line is the line which is washed by the water wherever it covers the bed of the river within its banks. It lies along the bank at the mean level attained by the waters of the river when they reach and wash the bank without overflowing it.
- SHORE, OCEAN "This is the most important of the four zones, and extends from the low water mark inshore to the base of the cliff (large or small), which usually marks the landward limit of effective wave action. It is the zone over which the line of contact between land and sea migrates," per Shalowitz. This definition of "shore" describes the same zone as that given by Johnson, and Technical Report No. 4, for "Beach."
 - The legal definition of "shore" as defined by the U.S. Supreme Court in the case of Borax Consolidated, Ltd. V. City of Los Angeles, 296 U.S. 10, 22-23 (1935) is: (quote) By the civil law, the shore extends as far as the highest waves reach in winter. But by common law the shore "is confined to the flux and reflux of the sea at ordinary

- tides." It is the land "between ordinary high and low water mark, the land over which the daily tides ebb and flow. (end quote)
- By those definitions the civil law (at least in California) describes the "shore" or "beach" as defined by Shalowitz, whereas the common law describes the same zone which is also legally defined as the "tidelands." See BEACH, FORESHORE, BACKSHORE and TIDELANDS.
- **SHORE SPACE LIMITATION** The limitation of 160 rods or 80 rods of shore space along navigable waters pertaining to certain land entries in Alaska. For provisions of determining the "*shore space*," see 43 C.F.R. 2094.1.
- **SHORE-SPACE RESERVE, ALASKA** A reservation of public lands along navigable and certain other waters in Alaska, chiefly for harborage purposes.
- **SIC** Thus. Intentionally so written. Used after a word or passage to indicate that it is meant to be exactly as printed or to indicate that it reproduces an original even if in error as to spelling or usage.
- SIDE LINE Applied to a strip of land such as a lot or other tract, it defines the boundaries of that tract. Not applied to the ends of a strip. In mining law, the "side lines" of a claim, as platted or laid down on the ground, are those which mark its longer dimension where it follows the course of the vein. If the claim as a whole crosses the vein instead of following its course, the "side lines" are still the boundaries of the longer dimension, even though they cross the vein. See END LINE.
- **SIGHT TREE** Same as Line Tree, or on older surveys, Station Tree. See LINE TREE.
- SINGLE PROPORTIONATE MEASUREMENT (also called "two-way" proportion) A method of proportioning measurement in the restoration of a lost corner whose position is determined with reference to alinement in one direction. Examples of such corners are quarter-section corners on the line between two section corners, all corners on standard parallels, and all intermediate positions on any township boundary line. The ordinary field problem consists of distributing the excess or deficiency between two existent corners in such a way that the amount given to each interval shall bear the same proportion to the whole difference as the record length of the interval bears to the whole distance. After having applied the proportionate difference to the record length of each interval, the sum of the several parts will equal the new measurement of the whole distance. See PROPORTIONATE MEASUREMENT and DOUBLE PROPORTIONATE MEASUREMENT.
- **SITE** A parcel of ground set apart for a specific use. The word itself does not necessarily imply definite boundaries. **SIXTEENTH-SECTION CORNER** Also termed "quarter-quarter section corner." A corner at an extremity of a boundary of a quarter-quarter section; midpoint between or 20 chains from the controlling corners on the section or township boundaries. Written as 1/16 section corner.
- **SIXTH PRINCIPAL MERIDIAN** The last of the principal meridians to be named an ordinal number, it governs surveys in Kansas, Nebraska, most of Colorado and Wyoming and a small part of South Dakota. Adopted in 1855, it is abbreviated 6th Prin. Mer. See ORDINAL NUMBER.
- **SKEW MERCATOR** See OBLIQUE MERCATOR.
- **SLOPE CHAINED** In some of the older surveys the chaining (measuring) was done on the slope but the distances measured were not always reduced to the horizontal equivalent and the slope distance was entered in the field note record. When this systematic error is detected during a retracement cadastral surveyors refer to the line as having been "sloped chained."
- **SLOPE CHAINING** The process of direct measurement of an inclined distance and vertical angle for reduction to its horizontal equivalent.
- **SMALLEST LEGAL SUBDIVISION** A quarter-quarter section or one lot. See SUBDIVISION, SMALLEST LEGAL and MINOR SUBDIVISIONS.
- **SMALL-HOLDING CLAIM ENTRY** An entry in connection with which the entryman and his predecessors-in-interest maintained continuous, adverse, actual, bona fide possession of public lands in the Southwest for at least 20 years prior to cadastral survey of the lands involved (acts of March 3, 1891, 26 Stat. 861; and June 15, 1922, 42 Stat. 650).
- SMALL TRACT A parcel of public lands of 5 acres or less which has been found chiefly valuable for sale or lease as a home, recreation, business, or community site under the act of June 1, 1938 (52 Stat. 609; 43 U.S.C. 682 a-c), as amended.
- SMALL TRACT ACT The Act of June 1, 1938 (52 Stat. 609; 43 U.S.C. 682 a-c), as amended, authorizes the Secretary of the Interior, under its terms and requirements, to lease or sell parcels (not to exceed 5 acres) of vacant, unreserved public lands, including such lands in Alaska, and public lands withdrawn under the "General Orders of Withdrawal," and those lands withdrawn or reserved for any purposes by the Secretary, but which may be classified by him as being chiefly valuable for sale or lease as a home, recreation, business, or community site under conditions as set forth in the Act. See WITHDRAWAL and WITHDRAWAL, GENERAL ORDERS OF.

- SMALL-TRACT CLASSIFICATION Classification of public lands as being chiefly valuable for sale or lease as small tracts; also, the public lands so classified.
- **SNOW BLAZE** In regions subject to heavy snowfall it is desirable survey practices to make a small additional blaze at a height of 6 or 8 feet above the ground on tree monuments and bearing trees to attract attention to them during the winter.
- **SOLAR ATTACHMENT** An auxiliary device mounted on a surveyor's instrument which mechanically solves the pole-zenith-sun spherical triangle. When the sun's declination, the latitude of the station and hour angle of the sun are correctly set off on the solar attachment, the instrument on which it is mounted may readily be oriented to the astronomic meridian.
 - The first solar attachment was patented by William Burt and when mounted on a surveyor's compass it became a "Burt Solar Compass." Modern solar attachments are of the telescopic type.
- **SOLAR LINE** A line run along an astronomic bearing with a solar attachment. See TACK LINE.
- **SOLDIERS' ADDITIONAL HOMESTEAD ENTRY** A selection based on rights of Civil War veterans who had made a homestead entry for less than 160 acres to select enough public lands to make up the difference between the area of their homestead and 160 acres.
- SPECIAL DEPOSIT SURVEY A survey authorized by law, executed by BLM personnel but at no cost to the government, estimated costs to be deposited to BLM prior to survey. (43 U.S.C. 682b, 757-761, 887; 30 U.S.C. secs. 701 through 709; 43 C.F.R. 2215.3; BLM 2233.15A5 and A5b; 2233.15A6a and d; 2215.31c.) One example: Mining Claim Occupancy Surveys.
- **SPECIAL INSTRUCTIONS** The written statement containing the detailed specifications for every cadastral survey assignment.
 - The special instructions include the basic information necessary for accomplishing the field work and are an important part of the record relating to the survey. Special instructions are usually prepared by the officer in administrative charge of the work. They are usually written in the third person and, together with the Manual and supportive data, contain the necessary specifications and information for execution of the survey. See ASSIGNMENT INSTRUCTIONS.
- **SPECIAL LAND USE PERMIT** A permit which authorizes the use of public lands for purposes not specifically authorized, or forbidden, by law.
- **SPECIAL MEANDER CORNER** A corner established at: 1) The intersection of a surveyed subdivision-of-section line and a meander line; 2) The intersection of a computed center line of a section and a meander line. In the latter case the center line of the section is calculated and surveyed on a theoretical bearing to an intersection with the meander line of a lake (over 50 acres in area) which is located entirely within a section.
- SPECIAL SURVEY A cadastral survey that involves unusual application of, or departure from, the rectangular system. They often carry out the provisions of a special legislative act and include such work as small tract surveys; townsite survey; island and omitted land surveys; homestead, homesite, trade and manufacturing site surveys; also the survey and resurvey of portions of sections.
- **SPECIAL SURVEYS, ALASKA** Metes and bounds surveys of areas settled upon or applied for under certain special land laws applicable to the State of Alaska. See METES-AND-BOUNDS SURVEY.
- **SPHERICAL COORDINATES** Pairs of angular values such as latitude and longitude or right ascension and declination which locates points on a sphere in reference to fixed, or defined, great circles.
- **SPHEROID** In general, any figure differing but little from a sphere. In geodesy, a mathematical figure closely approaching the geoid in form and size. See GEOID, GEODETIC SURVEY and SPHEROID*.
- **SQUATTER'S RIGHTS** An asserted right to occupy public lands by virtue of occupancy.
- STANDARD In cadastral survey slang, an ordinary steel pocket tape marked in chains or feet. In earlier surveyor usage, "standard" referred to a standard length against which the old-style survey chain was checked for accuracy.
- **STANDARD CORNER** A senior corner on a standard parallel or base line.
- **STANDARD FIELD TABLES AND TRIGONOMETRIC FORMULAS** A supplement to the Manual of Surveying Instructions first published by the General land office in 1910. The eighth edition was published in 1956. The tables and data are designed for use by cadastral surveyors in the field and office.
- STANDARD PARALLEL Also called "correction line." A line extended east or west from the principal meridian, usually at intervals of 24 miles north and south of the base line, along a parallel of latitude. Standard parallels are established to correct for the convergence of range lines and to maintain a workable adherence to the requirement that each township be 6 miles square. They are surveyed in the manner prescribed for the survey of the base line.
- STANDARD PARALLEL, AUXILIARY Where standard parallels have been placed at intervals exceeding 24 miles (under practice permissible prior to the issuance of the 1881 Manual of Surveying Instructions which specified 24 mile tracts), and conditions require additional standard lines, an intermediate correction line is established to which

- may be given a local name, such as "Fifth Auxiliary Standard parallel North," or "Cedar Creek Correction Line." An auxiliary standard parallel is run, in all respects, like a regular standard parallel.
- **STAPLE CROP** A chief commodity or production of a place. A crop used, needed or enjoyed by many people and therefore produced regularly, or in large quantities, is a "staple crop." Under the meaning of the grants of swamp and overflowed lands to various states, a "staple crop" may include tame grass or hay as well as the cereals, cotton or tobacco normally grown in a specific region. See SWAMP AND OVERFLOWED LANDS.
- STARE DECISIS To abide by, or adhere to, decided cases. It is under the policy of "stare decisis" that courts stand by precedent and do not disturb a settled point. It is the doctrine which states that when the court has once laid down a principle of law as applicable to certain state of facts, it will adhere to that principle and apply it to all future cases where facts are substantially the same. Also See RES JUDICATA and OBITER DICTUM.
- **STATE COORDINATE SYSTEMS** The plane-rectangular coordinate systems established by the United States Coast and Geodetic Survey, one or more for each state in the United states, used for defining positions in terms of plane-rectangular (x and y) coordinates. Also called State Plane Coordinate Systems.
- **STATE DIRECTOR (BLM)** The principal Bureau official at the State level. He is directly accountable to the Director of the Bureau of land management. Formerly called State Supervisor.
- **STATE EXCHANGE** An exchange between the Federal Government and a State. See EXCHANGE, PRIVATE EXCHANGE and TAYLOR ACT EXCHANGE.
- STATE GRANTS Grants of public lands were made to States for schools and other public purposes. The most common State grants are: school, swamp, tide land, land under navigable waters, and lands for internal improvements. Generally, title to State grant lands could pass only after survey of the lands. Originally, mineral lands were excluded. Also excluded were lands taken by settlers, withdrawn for public purposes or otherwise disposed of by the Government. These grants by Congress were grants which may pass title to lands without further approval or documentation by a Federal agency. See SCHOOL LAND PATENT, INDEMNITY LANDS and RAILROAD GRANT.
- STATEHOOD The Thirteen Original States organized the Federal Union under the name of "The United States of America" by ratifying the Articles of Confederation, and later, the Constitution. They are: New Hampshire, New York, Maryland, Georgia, Delaware, Massachusetts, Pennsylvania, Virginia, Connecticut, Rhode Island, New Jersey, North Carolina and South Caroline. The other states were admitted to the Union by acts of Congress (enabling acts), usually upon petition of the citizens residing in the territories in question, as follows:

Alabama – December 14, 1819 (3 Stat. 608)

Alaska - January 3, 1959 (72 Stat. 339)

Arizona - February 14, 1912 (36 Stat. 557; 37 Stat. 1728)

Arkansas – June 15, 1836 (5 Stat. 50)

California – September 9, 1850 (9 Stat. 452)

Colorado - August 1, 1876 (18 Stat. 474; 19 Stat. 665)

Florida - March 3, 1845 (5 Stat. 742)

Hawaii – August 21, 1959 (73 Stat. 4)

Idaho – July 3, 1890 (26 Stat. 215)

Illinois – December 3, 1818 (3 Stat. 536)

Indiana – December 11, 1816 (3 Stat. 399)

Iowa – December 28, 1846 (9 Stat. 117)

Kansas – January 29, 1861 (12 Stat. 126)

Kentucky – June 1, 1792 (1 Stat. 189)

Louisiana – April 30, 1812 (2 Stat. 701)

Maine - March 15, 1820 (3 Stat. L. 544)

Michigan – January 26, 1837 (5 Stat. 144)

Minnesota – May 11, 1858 (11 Stat. 285)

Mississippi – December 10, 1817 (3 Stat. 472)

Missouri – August 10, 1821 (3 stat. 645, 3 stat. Appendix II)

Montana – November 8, 1889 (25 Stat. 676; 26 Stat. 1551)

Nebraska – March 1, 1867 (14 Stat. 391, 820)

Nevada – October 13, 1864 (13 Stat. 30, 749)

New Mexico – January 6, 1912 (36 Stat. 557; 37 Stat. 1723)

North Dakota - November 2, 1889 (25 Stat. 676; 26 Stat. 1548)

Oklahoma – November 16, 1907 (34 Stat. 267; 35 Stat. 2160)

Ohio - Feb. 19, 1903 (2 Stat. 201)

Oregon – February 14, 1859 (11 Stat. 383)

South Dakota – November 2, 1889 (25 Stat. 676; 26 Stat. 1549)

Tennessee – June 1, 1796 (1 Stat. L. 491)

Texas – December 25, 1845 (9 Stat. L. 108)

Utah – January 4, 1896 (28 Stat. 107; 29 Stat. 876)

Vermont – March 4, 1791 (1 Stat. L. 191)

Washington - November 11, 1889 (25 Stat. 676; 26 Stat. 1552)

West Virginia – June 19, 1863 (13 Stat. L. 731)

Wisconsin – May 29, 1848 (9 Stat. 233)

Wyoming - July 10, 1890 (26 Stat. 222).

- STATE PLANE COORDINATE SYSTEMS The plane-rectangular coordinate systems established by the U.S. Coast and Geodetic Survey, one for each State in the Union, certain territories and the Commonwealth of Puerto Rico, used for defining positions of geodetic stations in terms of plane-rectangular (x and y) coordinates. The two principal systems in use in the United States are the Lambert Conformal Conic map projection and the Transverse Mercator map projection. See OBLIQUE MERCATOR PROJECTION.
- **STATE SELECTION** An application to acquire title submitted by a state. See STATE SELECTION SURVEY.
- **STATE SELECTION LANDS, ALASKA** The enabling act admitting Alaska as a State provides that, within 25 years after statehood, Alaska is granted and entitled to select 103,350,000 acres (161,484 square miles) of vacant and unappropriated public land.
- **STATE SELECTION SURVEY** The survey providing limited monumentation of the township boundaries of lands selected by the State of Alaska.
- STATES EXEMPT FROM FEDERAL MINING LAW States whose land never belonged to the United States, and states specifically exempted from the Federal mining laws, are not open to location under Federal laws. These states are Virginia, North Carolina, South Carolina, Pennsylvania, Rhode Island, New York, New Hampshire, New Jersey, Massachusetts, Maryland, Georgia, Delaware, Connecticut, Maine, Vermont, Kentucky, Alabama, Kansas, Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Oklahoma, Wisconsin, Texas and Hawaii. See LANDS OPEN TO MINERAL LOCATION.
- **STATE SUPERVISOR** Former title of the officer in charge of a State Office of the Bureau of Land Management. Now called *"State Director."*
- **STATUS DIAGRAM** A diagram prepared from a Master Title Plat and Historical Index. A status diagram showing the public domain lands usually accompanies the special instructions for each survey.
- STATUS OF PUBLIC LANDS The information with respect to any particular parcel or tract of public land; its legal description; whether surveyed or unsurveyed; the non-federal rights or privileges, if any; which attach to it or its resources; whether classified as mineral lands; withdrawals or special laws, if any, which apply to it; and any other pertinent information which may influence the operation of the public-land laws so far as its use or disposal is concerned.
- STATUTES AT LARGE See UNITED STATES STATUTES AT LARGE.
- **ST. HELENA MERIDIAN** The principal meridian governing surveys in the southeastern part of Louisiana; it was adopted in 1819.
- **STICK** A measurement term used in some field notes and deeds in the early 1800's, a stick is ½ chain or 2 poles (rods). It is the point where, in the use under Tiffin's 1815 instructions of "a two poles chain of 50 links," a chain man called out "stick" to be replied with "stuck." See OUT, POLE, PERCH, ROOD and TALLY.
- **STOCKRAISING HOMESTEAD ENTRY** An entry of public lands, classified as being chiefly valuable for grazing and the growing of forage crops, under the provisions of the Stockraising Homestead Act of December 29, 1916. The provisions for such homesteads were, by implication, repealed by the Taylor Grazing Act.
- **STONE BOUND** A substantial stone post set into the ground with its top end approximately flush with the ground surface. Used to mark accurately and permanently the important corners of a land survey.
- **STOPE** An underground excavation in which ore is mined, usually by working from below.
- **STRADDLE STAKES** In determining the point of intersection of two lines, stakes are usually lined in on both sides of the point of intersection. Since they straddle the point, surveyors call them "straddle stakes."
- **STRAIGHT BASE LINE** A system for placement of the line that divides the inland waters from the marginal sea in which straight lines connect salient points on outermost limits and fringe islands. See BASELINE.
- STREET Any public thoroughfare (street, avenue, boulevard, or park) or space more than 20 ft wide which has been dedicated or deeded to the public for public use.
- STREET LINE A lot line dividing a lot or other area from a street; or more specifically, the side or end boundary of a street, defined by the instrument creating that street as having a stated width.

- **STRIKE** In geology and mining, the direction of a line formed by the intersection of a stratum with a horizontal plane.
- **STRONG BEARING** A survey slang term for a bearing which departs markedly from cardinal. A bearing of 2 or more degrees from cardinal may be considered a "*strong*" bearing. "*Heavy bearing*" is used synonymously.
- **ST. STEPHENS MERIDIAN** The principal meridian governing surveys in southern Alabama and south eastern Mississippi; it was adopted in 1805.
- SUBDIVISION (verb) 1) Subdivision of a township into sections. 2) Subdivision of a section into half-sections, quarter-sections, sixteenth-sections or sixty-fourth-sections, or into lots, according to the Manual of Surveying Instructions. 3) The process of surveying such subdivisions. 4) In the private practice of land survey, subdivision is the division of an area into lots, streets, rights-of-way, easements and accessories, usually according to State law and local regulations (noun) A particular aliquot part, lot, or parcel of land described according to the official plat of its cadastral survey. See SUBDIVISION, SMALLEST LEGAL, URBAN SUBDIVISION and MINOR SUBDIVISION.
- **SUBDIVISION-OF-SECTION SURVEY** A survey which subdivides a previously surveyed section into the required aliquot parts or lots, using methods which are legally prescribed. See REGULAR SECTION SUBDIVISION.
- **SUBDIVISION, SMALLEST LEGAL** For general purposes under the public-land laws, a quarter-quarter section or one lot. Under certain of these laws and under special conditions, applicants, claimants, etc., can select subdivisions smaller than a quarter-quarter section or lot. See MINOR SUBDIVISIONS and ALIQUOT PARTS.
- SUBJECT TO SURVEY Open to public land survey. See LANDS SUBJECT TO SURVEY.
- SUBMERGED LANDS ACT Also called Public Law 31. The act passed during the 1st session of the 83rd Congress and signed into law may 22, 1953. Confirms and establishes the titles of the states to lands beneath navigable water within their boundaries and to the natural resources within such lands and water. The act also establishes jurisdiction and control of the United States over the natural resources of the seabed on the continental shelf seaward of state boundaries. See CONTINENTAL SHELF, OUTER CONTINENTAL SHELF, and OUTER CONTINENTAL SHELF LANDS ACT.
- **SUPPLEMENTAL MASTER TITLE PLAT** An extension of the Master Title Plat, it depicts a congested section, or sections, within a township, drawn to a scale larger than the master title plat in order to adequately show land status in the area. See MASTER TITLE PLAT and USE PLAT.
- **SUPPLEMENTAL PATENT** A patent issued to modify one previously issued, such as a patent issued without a mineral reservation clause, covering coal, to supersede in whole or in part a patent which had been issued with coal reserved to the United States. In the above described case, the patent would be referred to as a "supplemental non-coal patent."
- SUPPLEMENTAL PLAT A plat prepared entirely from office records designed to show a revised subdivision of one or more sections without change in the section boundaries and without other modification of the record. Supplemental plats are required where the plat fails to provide units suitable for administration or disposal, or where a modification of its showing is necessary. They are also required to show the segregation of alienated lands from public lands, where the former are included in irregular surveys of patented mineral or other private claims made subsequent to the plat of the subsisting survey, or where the segregation of the claims was overlooked at the time of its approval. In the past, Supplemental Plats were called "diagrams" or "MAPS." See PLAT, MASTER TITLE PLAT, USE PLAT and STATUS DIAGRAM.
- SUPRA Above. When used in text it refers to matter in a previous part of the publication. See INFRA and OP. CIT. SUPRA
- **SUPREME COURT OF THE UNITED STATES** The highest court in the land. The court of last resort in the federal and state judiciaries. Its jurisdiction is essentially appellate, but it has irrevocable original jurisdiction in cases affecting ambassadors, public ministers and consuls or in cases in which a state is a party. The court is composed of a Chief Justice and eight Associate Justices. See UNITED STATES DISTRICT COURTS and UNITED STATES COURTS OF APPEALS.
- **SURFACE RIGHTS** All rights in the land excepting the oil, gas and mineral rights to underground deposits.
- **SURVEY** 1) The plat and the field-note record of the observations, measurements, and monuments descriptive of the work performed. Occasionally used as implying that the official plat is "*The Survey*." Commonly, any survey but, specifically, an original survey. 2) The process of recording observations, making measurements, and marking the boundaries of tracts of lands. See RESURVEY and SURVEY*.
- **SURVEYING INSTRUCTIONS** Various regions of the United States have been surveyed under amended or differing instructions from the passage of the first Land Ordinance to the present. The Ordinance of May 20, 1785, gave explicit cadastral survey instructions which were to be carried out under the personal supervision of the

Geographer of the United States, Thomas Hutchins. His successor, Rufus Putnam, was given the title "Surveyor General of the Northwest Territory" under the terms of the Act of May 18, 1796. He wrote letters of instruction to deputy surveyors as did his successors, Jared Mansfield and Josiah Meigs. In 1815, Edward Tiffin, who succeeded Meigs as Surveyor General of Territories east of the Mississippi, issued the first signed and dated general instructions for the guidance of deputy surveyors, though they were partially based on an unsigned, undated manuscript prepared earlier by Mansfield. Other printed circulars followed.

In 1851, a Manual of Instructions was issued to the Surveyor General of Oregon. After that came the Manual of 1855, the Manual of 1871 (a copy of the 1855 manual), the Manual of 1881, the Manual of 1890, the Manual of 1894 and the Manual of 1902. In 1919, a part of the Manual of 1930 was published, then the Manual of 1930 and the Manual of 1947. The Manual of Surveying Instructions for the Survey of the Public Lands of the United States, 1973, is the current manual of surveying instructions.

- **SURVEYING, LAND** The determination of boundaries and areas of tracts of land. Land boundaries are usually defined by ownership, commencing with the earliest owners through successive ownerships and partitions. Land surveying includes the re-establishment of original boundaries and the establishment of such new boundaries as may be required in the partition of the land. See CADASTRAL SURVEY.
- SURVEYOR GENERAL Prior to 1925, an officer in charge of the survey of the public lands. The Act of May 18, 1796, abolished the office of the Geographer of the United States and provided for the appointment of a Surveyor General. President George Washington appointed Rufus Putnam Surveyor General of the Northwest Territory under the terms of this act. See ACT OF MAY 18, 1796, GEOGRAPHER OF THE UNITED STATES, UNITED STATES SUPERVISOR OF SURVEYS and CHIEF, DIVISION OF CADASTRAL SURVEYS.
- **SURVEY, ORIGINAL** See ORIGINAL SURVEY.
- **SUSPENDED APPLICATION OR ENTRY** An application or entry upon which adverse action by the Bureau of Land Management has been deferred.
- **SUSPENDED SURVEY** Also called suspended plat. When question or doubt arises concerning an accepted survey, all actions related to the area covered may be held in abeyance until the matter is resolved. The survey may be corrected, reinstated or cancelled, either in whole or in part, but no action based on the plat may be initiated or completed while the survey is suspended. See CANCELLATION.
- **SWAMP** 1) Low lying land saturated with moisture and overgrown with vegetation but not covered with water. 2) Land at elevations below the upland such as would be wet and unfit for agriculture without construction of artificial drainage. See MARSH, SALT MARSH and SWAMP AND OVERFLOWED LANDS.
- SWAMP AND OVERFLOWED LANDS Any quarter-quarter section or lot the greater part of which was so swampy or subject to overflow during the planting, growing or harvesting season, in the majority of years at or near the date of the grant of such lands, as to be unfit for cultivation in any staple crop of the region in which it is located without the provisions of some artificial means of reclamation. In common usage "swamp" and "overflowed" lands are regarded as synonymous. See SWAMP-LAND GRANT, LOUISIANA SWAMP LAND ACT OF 1849, SWAMP LANDS ACT OF 1850, SWAMP LANDS ACT OF 1860, STAPLE CROP, TIDELANDS, MARSH and SALT MARSH.
- SWAMP-LAND GRANT A State grant consisting of public lands deemed swampy and unfit for cultivation. The lands were granted to enable the various states receiving them to aid in their reclamation. See SWAMP AND OVERFLOWED LANDS, LOUISIANA SWAMP LAND ACT OF 1849, SWAMP LANDS ACT OF 1850, SWAMP LANDS ACT OF 1860 and IN PRAESENTI.
- SWAMP LANDS ACT OF 1850 The Act of September 28, 1850 (9 Stat. 519), extended the Louisiana Swamp Land Act to the other public-land States then in the Union. See LOUISIANA SWAMP LAND ACT and SWAMP LANDS ACT OF 1860.
- **SWAMP LANDS ACT OF 1860** This March 12, 1860 Act (12 Stat. 3) extended the Swamp Lands Act to the States of Minnesota and Oregon. The various swamp-land grants were carried over into R.S. sec. 2479 (43 U.S.C.A. sec. 982). For a notable exception to the swamp-land laws, see ARKANSAS COMPROMISE ACT. See LOUISIANA SWAMP LAND ACT OF 1849 and SWAMP LANDS ACT OF 1850.

Τ

T (Land Status Records) – Township.
TA (Land Status Records) – Tentative Approval.
TALL MER (Land Status Records) – Tallahasee Meridian.
TC (Land Status Records) – Timber culture.
TCP (Land Status Records) – Timber Cutting Permit.